

Amendments to the Claims:

A clean version of the entire set of pending claims, including amendments to the claims, is submitted herewith per 37 CFR 1.121(c)(3). This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-2. (Canceled).

3. (Currently Amended) The system of claim [[2]]17, wherein the contrast in wettability ~~of substrate~~ is provided by a monolayer of a suitable molecule provided on the surface of the substrate, which monolayer is made by micro-contact printing.

4-5. (Canceled)

6. (Currently Amended) The system of claim [[4]]17, wherein the surface structure of the substrate is pre-treated physically such that the edge of ~~the~~a fluid meniscus of the liquid droplet is guided by grooves and ridges of the physically pre-treated structure ~~to~~toward the final defined placement position ~~of the small object~~.

7. (Canceled)

8. (Currently Amended) The system of claim [[4]]17, wherein the defined placement position on the substrate has a shape which corresponds to ~~the~~a shape of the small solid object, so that the solid object is aligned to match with the placement position during evaporation of the droplet.

9. (Currently Amended) A method of manipulation of a small solid object ~~having on~~on a substrate, the substrate having a define placement position on a surface thereof, wherein a region of the surface of the substrate including the defined

placement position has a greater wettability than a region of the surface of the substrate adjacent the defined position so that there is a wettability contrast therebetween with a pre-treated surface structure to receive the small object, which object is pre-treated by a monolayer to make the side of the object in contact with the substrate hydrophilic, the method comprising:

- [[[-]]] placing the small object by rough placement of the object on onto the substrate in a vicinity of a defined placement position of for the object,
- [[[-]]] placing a liquid droplet on onto the substrate in the vicinity of the placement position of the small object,
- [[[-]]] dissolving of immersing the object in the droplet on the surface of the substrate such that the object can freely float in within the liquid droplet,
- [[[-]]] moving the liquid droplet from the poor wetting area to the good wetting area region having lower wettability to the region having greater wettability,
- [[[-]]] positioning the object to the defined placement position by the evaporation of the liquid droplet,
- [[[-]]] orienting the object with respect to the placement position by means of a magnetic field, and
- [[[-]]] interconnecting the object with the substrate by standard lithographic way.

10. (Currently Amended) The system of claim [[4]]17, wherein the object is provided with a magnetic layer, and wherein the object is aligned with respect to the defined placement position by means of a magnetic field.

11. (Currently Amended) The system of claim [[7]]17, wherein the small object is pre-treated by a monolayer to make a side of the object in contact with the substrate hydrophilic.

12-15. (Canceled)

16. (Currently Amended) The method of claim 9, further comprising pre-treating the small object is pre-treated-to provide a dissolvable layer on a surface thereof.

17. (New) A system, comprising:
a substrate having a defined placement position on a surface thereof;
a solid object having a dissolvable layer on a surface thereof, the object being disposed on the surface of the substrate at a position different from the defined placement position; and
a liquid droplet provided onto the substrate so as to cover the object that is disposed on the substrate, wherein the dissolvable layer is adapted to dissolve in the liquid droplet so that the object floats freely in the liquid droplet,
wherein a region of the surface of the substrate including the defined placement position has a greater wettability than a region of the surface of the substrate adjacent the defined placement position so that there is a wettability contrast therebetween and so that as the liquid droplet evaporates, the object is deposited at the defined placement position on the substrate.

18. (New) A method, comprising:
providing a substrate having a defined placement position on a surface thereof, wherein a region of the surface of the substrate including the defined placement position has a greater wettability than a region of the surface of the substrate adjacent the defined placement position;
providing onto the surface of the substrate a liquid droplet having a solid object disposed therein, the solid object having a magnetic layer;
rotating the object within the liquid droplet to a specific orientation with respect to the substrate by applying a magnetic field to the liquid droplet; and
evaporating the liquid droplet so that the object is deposited at the defined placement position on the substrate.

19. (New) The method of claim 18, wherein the substrate includes a metal structure on the surface thereof, and the object includes a metal layer on a surface thereof, the method further comprising melting the metal on the substrate surface and the metal on the object to form a connection between the object and the substrate.

20. (New) The method of claim 18, wherein providing the liquid droplet onto the substrate surface comprises:

expelling a plurality of liquid droplets from an ink-jet printer toward the substrate;

inspecting the plurality of liquid droplets during a flight between the ink-jet printer and the substrate; and

deflecting away from the substrate droplets which do not have any solid objects disposed therein.

21. (New) The method of claim 18, further comprising flipping the object within the liquid droplet by applying a magnetic field to the liquid droplet.